

Claims:

1-24. (cancelled)

25. (currently amended) The method according to ~~claim 17~~ claims 37 or 39 wherein the difference between the theoretical conductivity of the emulsion and the bulk conductivity of the emulsion is at least about 4 $\mu\text{S cm}^{-1}$.

26. (previously presented) The method according to claim 25 wherein the difference between the theoretical conductivity of the emulsion and the bulk conductivity of the emulsion is at least about 6 $\mu\text{S cm}^{-1}$.

27. (currently amended) The method according to ~~claim 17~~ claims 37 or 39 wherein at least about 90% by volume of the droplets of the disperse phase within the emulsion have an average diameter of less than about 60 μm .

28. (previously presented) The method according to claim 27 wherein at least about 90% by volume of the droplets of the disperse phase within the emulsion have an average diameter in a range of about 20 to about 40 μm .

29-33. (cancelled)

34. (currently amended) The method according to ~~claim 17~~ claims 37 or 39 wherein the droplets formed on discharge from an aerosol spray device have a charge to mass ratio of at least about $\pm 1 \times 10^{-4}$ C/kg.

35. (previously presented) The method according to claim 34 wherein the droplets formed on discharge from an aerosol spray device have a charge to mass ratio of at least about $\pm 2 \times 10^{-4}$ C/kg.

36. (currently amended) The method according to ~~claim 17~~ claims 37 or 39 in which the composition is an insecticidal composition that contains at least one insecticide in an amount of about 0.001% to about 5% w/w.

37. (new) A method of enhancing the unipolar charge which is imparted to droplets of an emulsion on discharge from an aerosol spray device, the method comprising forming the droplets from an oil-in-water or a water-in-oil emulsion composition which comprises:

- (a) at least one propellant in an amount of about 10% to about 60% w/w,
- (b) at least one non-ionic alkoxylated alcohol surfactant in an amount of from about 0.01 to about 1.0% w/w,
- (c) optionally at least one solvent within an oil phase of the emulsion in an amount of up to about 20% w/w, said solvent being selected from the group consisting of n-paraffins and isoparaffins,
- (d) a component in an amount of from about 0.01 to about 10% w/w of the non-ionic surfactant present in the composition, said component being selected from the group consisting of benzalkonium chloride, sodium laureth sulphate and oleic acid in an amount such that a theoretical conductivity of the emulsion is less than a bulk conductivity of the emulsion and the difference is at least about 0.5 μ S cm⁻¹, and
- (e) water.

38. (new) The method according to claim 37 wherein (b) the non-ionic surfactant is a C₁₂-C₁₅ alcohol ethoxylated with 5 moles of ethylene oxide, and (d) the component is benzalkonium chloride or sodium laureth sulphate.

39. (new) A method of enhancing the unipolar charge which is imparted to droplets of an emulsion on discharge from an aerosol spray device, the method comprising forming the droplets from an oil-in-water or a water-in-oil emulsion composition which comprises:

- (a) at least one propellant in an amount of about 10% to about 60% w/w,
- (b) polyglycerol oleate in an amount of from about 0.01 to about 1.0% w/w,

(c) at least one solvent within an oil phase of the emulsion in an amount of up to about 20% w/w, said solvent being selected from the group consisting of n-paraffins and isoparaffins,

(d) a component in an amount of from about 0.01 to about 10% w/w of the polyglycerol oleate present in the composition, said component being selected from the group consisting of oleic acid, sodium oleate, potassium oleate and mixtures thereof in an amount such that a theoretical conductivity of the emulsion is less than a bulk conductivity of the emulsion and the difference is at least about $0.5\mu\text{S cm}^{-1}$, and

(e) water.

40. (new) A method of enhancing the electrostatic charge imparted to droplets of a composition in a form of a water-in-oil or an oil-in-water emulsion on discharge from an aerosol spray device in which the composition includes:

(a) at least one propellant in an amount of about 10% to about 60% w/w,
(c) optionally at least one solvent within an oil phase of the emulsion in an amount of up to about 20% w/w, said solvent being selected from the group consisting of n-paraffins and isoparaffins, and
(e) water,

the method comprising mixing with the composition (b) a non-ionic alkoxylated alcohol surfactant in an amount of from about 0.01 to about 1.0% w/w and (d) a component in an amount of from about 0.01 to about 10% w/w of the non-ionic surfactant present in the composition, said component being selected from the group consisting of benzalkonium chloride, sodium laureth sulphate and oleic acid, the amount of the component being such that a theoretical conductivity of the emulsion is less than a bulk conductivity of the emulsion.

41. (new) A method of enhancing the electrostatic charge imparted to droplets of a composition in a form of a water-in-oil or an oil-in-water emulsion on discharge from an aerosol spray device in which the composition includes:

(a) at least one propellant in an amount of about 10% to about 60% w/w,

(c) at least one solvent within an oil phase of the emulsion in an amount of up to about 20% w/w, said solvent being selected from the group consisting of n-paraffins and isoparaffins, and

(e) water,

the method comprising mixing with the composition (b) polyglycerol oleate in an amount of from about 0.01 to about 1.0% w/w and (d) a component in an amount of from about 0.01 to about 10% w/w of the polyglycerol oleate present in the composition, said component being selected from the group consisting of oleic acid, sodium oleate, potassium oleate and mixtures thereof, the amount of the component being such that a theoretical conductivity of the emulsion is less than a bulk conductivity of the emulsion.